## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| In re Patent Application of   |   | MAIL STOP AF |              |
|-------------------------------|---|--------------|--------------|
| Stephanie Ayala et al.        |   | Group Art    | Unit: 3729   |
| Application No.: 09/545,288 ) |   | Examiner:    | MINH N TRINH |
| Filed:                        | April 7, 2000   | Confirmati   | on No.: 1602 |
|                               | METHOD FOR MAKING SMART ) CARDS CAPABLE OF OPERATING ) WITH AND WITHOUT CONTACT ) |              |              |

#### REQUEST FOR PRE-APPEAL BRIEF REVIEW

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Applicants request review of the final rejection of claims 1, 2 and 14-23 set forth in the Office Action dated October 13, 2006. This Request is being filed with a Notice of Appeal.

No amendments are being filed with this Request.

### Background

The rejected claims are directed to the manufacture of smartcards that contain antennas for wireless connection. The Fidalgo patent (US 5,598,032), upon which the rejections are based, illustrates the known structure for such cards. Referring to Figure 2, the card includes substrate 3 that supports a spiral antenna having a number of turns 5. Two contact terminals 15 are electrically connected to the respective ends of the antenna turns.

As discussed in the background portion of the application, a cavity is machined in the body of the card, to expose the contact terminals and accommodate an electronic module containing an integrated circuit chip. An arrangement of the type disclosed in the Fidalgo patent can present difficulties during the manufacturing process, since the machining operation could damage the antenna turns that are disposed between the two contact

terminals. See page 2, last paragraph, and page 3, first paragraph. To address this issue, the present application discloses an arrangement in which an insulating bridge is formed over the turns of the antenna, to enable the two ends of the antenna to be respectively connected to connection pads that are located on a common side of the antenna turns. In the example of Figures 1 and 2, for instance, a bridge 13 comprises insulating material 14 over the turns 11, and a conductive element 15 that connects the end of the outermost turn to a connection pad 12 located at the interior of the turns. With this arrangement, a cavity can be machined over the two connection pads 12, without causing any damage to the turns

## Rejection of Claim 1

11 of the antenna itself.

Claim 1 stands rejected under 35 U.S.C. § 102, as being anticipated by the Fidalgo patent. In the Response filed July 27, 2006, Applicants presented two separate arguments traversing this ground of rejection. See page 1, last partial paragraph, and all of page 2. The final Office Action only addresses the first of these two arguments.

# Connection Pads on a Common Side of the Antenna Turns

Claim 1 recites the step of "producing, on a support sheet, the antenna with at least two turns and a pair of connection pads that are both disposed on a common side of said antenna turns". As noted in Applicants' arguments identified above, the Fidalgo patent does not disclose this claimed feature. Rather, Figures 2 and 3 illustrate that the contact terminals 15 of the antenna are respectively located on opposite sides of the antenna turns 5. In responding to this argument, the final Office Action states "the connection pads 15 of the Fidalgo does dispose on a same or common side (top side of the substrate see Fig. 3) of the antenna turns 5..." (emphasis added).

In making the rejection, therefore, the Office Action is ignoring the clear meaning of the terminology in the claim, and focusing instead on an entirely different aspect of the card structure. Claim 1 explicitly recites that the connection pads are both disposed on a

common side of the antenna *turns*. The point of reference in the claim is the structure of the antenna itself, not the substrate on which it is disposed.

The Office Action is attempting to equate two totally disparate aspects of the card in an effort to make the rejection. The substrate is a planar structure, and it is common practice to form the terminals and the antenna on the same face of such a structure. In contrast, the antenna *turns* define a spiral structure. In making the rejection, the Office Action is ignoring the plain meaning of the term "disposed on a common side of said antenna turns," recited in claim 1. It does not identify any evidence that a person of ordinary skill in the art would equate the turns of an antenna with a different piece of structure, namely the substrate. Even if the terminals are disposed on the same surface of the substrate, that has no bearing on their location relative to the turns of the antenna.

Insulating Bridge on a Surface of the Turns that is Away from the Support Sheet

The second point of distinction identified by Applicants, in their traversal of the rejection of claim 1, is that the claim recites that at least one of the ends of the antenna is connected to a respective one of the connection pads "by means of an insulating bridge disposed on a surface of said turns that is away from said support sheet." The Office Action dated April 27, 2006, references element 6 of the Fidalgo patent as being such an insulating bridge. In their response, Applicants pointed out that this element is disclosed as a bonding layer in which the antenna 5 is embedded (see the response filed July 27, 2006, page 2, last paragraph). This bonding layer does not play any role in connecting the ends of the antenna to the contact terminals 15. Its function is to fix the antenna in place.

Nor is there any disclosure that this bonding layer is disposed "on a surface of said turns that is away from said support sheet." Rather, the disclosure that the antenna is "embedded in a layer of bonder" suggests that the antenna and the bonder are coplanar with one another. Despite Applicants' request, the final Office Action does not explain how the bonding layer 6 of the Fidalgo patent can be interpreted to anticipate the recitation that at

least one of the ends of the antenna is connected to a respective one of the connection pads "by means of" an insulating bridge disposed on a surface of the turns.

For at least the foregoing reasons, therefore, the final Office Action fails to demonstrate that the Fidalgo patent discloses every element recited in the claim, as required for a proper rejection under 35 U.S.C. § 102.

## Rejection of Claims 2 and 14

Claims 2 and 14 were also rejected under 35 U.S.C. § 102, as being anticipated by the Fidalgo patent. In the response filed July 27, 2006, Applicants presented separate arguments with respect to each of these two claims. Rather than repeat those argument herein, the Reviewing Panel is referred to page 3 of the response, first two paragraphs. The final Office Action dated October 13, 2006 does not address the substance of either of these arguments.

# Rejection of Claims 15-23 Under 35 U.S.C. § 103

Claims 15-23 were rejected as being unpatentable over the Fidalgo patent, under 35 U.S.C. § 103. The rejection of these claims implicitly acknowledges that they recite features not disclosed in the Fidalgo patent, and then goes on to conclude that it would be obvious to employ such features. As pointed out in the Response filed July 27, 2006, no support has been cited for any of the conclusory statements. See pages 4 and 5 of the Response. Again, the final Office Action does not address the substance of these arguments.

The rejection of claims 15-23 fails to meet at least one of the criteria for a prima facie case of obviousness, namely a showing that "the prior art reference (or references when combined) must teach or suggest all the claim limitations." The rejection of these clams does not make any attempt to show that the subject matter recited in the claims is taught by the sole reference upon which the rejection is based, or any other reference.

#### Conclusion

From the record, it can be seen that Applicants have presented a number of arguments traversing the rejections of claims 1, 2 and 14-23. The final Office Action only

Patent

Application No.. <u>09/545,288</u>

Attorney's Docket No. 1032326-000057

Page 5

addresses one of these arguments, and in doing so ignores the plain and ordinary meaning

of the claim language by referring to totally unrelated structure in the reference. The failure

to address the remaining arguments leaves unresolved the question of where the claimed

subject matter is found in the reference. As a result of these unresolved issues, there is an

insufficient record to be presented to the Board of Patent Appeals and Interferences for

consideration. Withdrawal of the final Office Action is respectfully submitted to be in order.

Respectfully submitted,

**BUCHANAN INGERSOLL & ROONEY PC** 

Date: February 12, 2007

By:

James A. LaBarre

Registration No. 28632

P.O. Box 1404 Alexandria, VA 22313-1404 703 836 6620